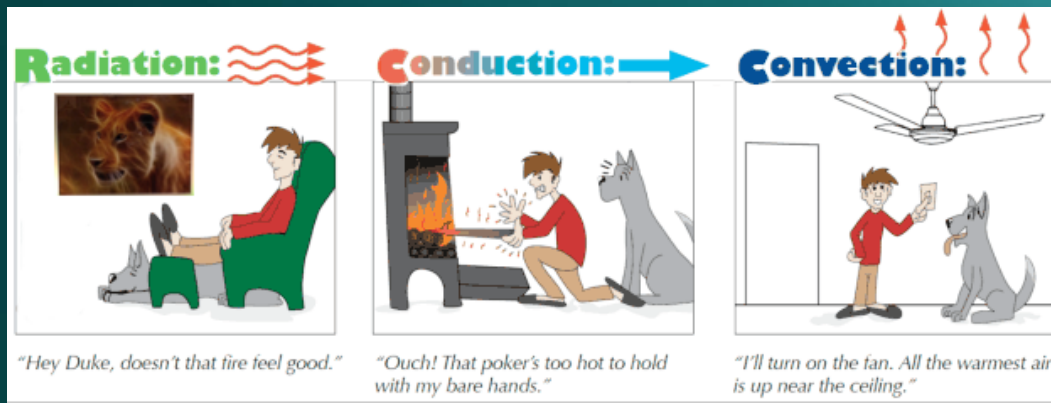


Infrared Heating

Health Benefits

What is IR heating?

The most famous and significant infrared heater is the sun . The heat radiated from its hot surface is vital to all life on earth. Infrared rays go a long way in space with minimum loss of energy. When the path of the beam meets the surface, its energy is absorbed , transformed into heat. The heated objects, in turn, transfer the heat to the air around us. Although the sun is so far away, its rays heat the ground, while space remains cold. The natural form of heating is unparalleled. Infrared heaters have the same effect as the sun, making it the most comfortable and efficient of all possible sources of heat.



When using convection heating systems hot air flows upwards and accumulates near the ceiling, thus creating layers of different temperatures. The air is heated and whenever air goes out heat goes out as well.



The thermal energy emitted by IR heater is absorbed by the surrounding surfaces such as floors, walls, furniture, etc. heating them. In turn, they give off heat to the air. Thermal radiation, similar to a conventional light, is not absorbed by air, so all of the energy from the heater reaches heated surfaces and the people within its range without loss.



This results in a more uniform spread of heat In the room and greater sense of comfort.

Far Infrared at the cellular level

Far Infrared emits photons; Infrared photons produce enzymes that activate macrophages, which help eliminate damaged and diseased tissue. Macrophages work on a cellular level. Nitric oxide is released and expands capillaries. It also increases blood circulation and carries toxins to the lymph system and out of the body.

One of the reasons FIR is suggested to produce beneficial results in a variety of illnesses is the ability of FIR waves to remove toxins, which are often at the core of many health problems. Numerous toxins are stored in our bodies. Clusters of water may encapsulate toxic gases. Where these toxins are accumulated, blood circulation is blocked and cellular energy is impaired. When a 10-micron FIR wave is applied to these large water molecules, the water begins to vibrate, which reduces the ion bonds of the atoms, which are holding together the molecules of water. As the breakdown of the water molecules occurs, encapsulated gases and other toxic materials are released.

Far Infrared and ions

For over half a century, researchers have studied the relationship between ions and health. Agreement seems to exist that our health is influenced to a significant degree by the quality and quantity of ions, which virtually saturate our natural environment. **A.D. Moore, a university professor from Michigan**, is a world-renown expert in the study of ions. He writes that the control of ion quantity in our air can induce positive effects on the human body, and that, for example, the intake of ion-saturated air can assist in curing patients. So it is common knowledge, today, that ions (and particularly anions) are integral factors in improving and sustaining health. **The best source of anions seems to be FIR.**

Far Infrared and cardiovascular function

Medical research confirms that the use of a sauna provides cardiovascular conditioning as the body works to cool itself and involves substantial increases in heart rate, cardiac output, and metabolic rate. As a confirmation of the validity of this form of cardiovascular conditioning, **extensive research by NASA** in the early 1980's led to the conclusion that far infrared stimulation of cardiovascular function would be the ideal way to maintain cardiovascular conditioning in American astronauts during long space flights.

Infrared and the musculoskeletal system

Japanese researchers report various positive results in application to musculoskeletal cases:

- ✓ Muscle Spasms - reduced or eliminated
- ✓ Traumatic Arthritis Brain Contusion - accelerated healing
- ✓ Disc Protrusion - related Neuralgia Brain Contusion - accelerated healing
- ✓ Tight Shoulders - relaxed /Muscle Tension – relaxed
- ✓ Bursitis - eliminated/ Shoulder Pain - relieved or eliminated
- ✓ Arthritis: Gouty, Rheumatoid - each substantially relieved or improved

Infrared and Nitric Oxide

1998 Nobel Prize in Medicine Award Winners Murad, Furchgott & Ignaro found that nitric oxide gas, which is produced, by far infrared, is used by white cells to defend against tumors and allows healing to take place.

Dr. Valentino Fuster, past president of the American Heart Association, called the nitric oxide discovery “one of the most important discoveries in the history of cardiovascular medicine because it promotes expansion of the capillaries and allows blood to increase circulation in the affected area and to then reduce the risk of heart attacks and strokes.

Infrared and Nitric Oxide

Dr. Lon R. Horwitz reports in *Augmentation of Wound Healing Using Monochromatic Infrared Energy; Advances in Wound Care*; author's unpublished research, that a FIR energy modality increases nitric acid in the blood and plasma of normal adult subjects. **A 1999 publication by Dr. Horwitz** strongly suggests that Far Infrared produces nitric oxide gas, which aided in the recovery of the five patients in a study, who could not get healing conventionally. They had various diabetic problems and were not able to heal, but they received the nitric oxide technology produced by the FIR, and healing took place for all of them.

When applying FIR technology, these researchers report seeing healing results from the production of nitric oxide by the hemoglobin due to the reaction of the photons of the FIR on the enzymes, which produces the nitric oxide gas. The immune cells get into the area and the circulation is increased. Pain is reduced, and the area then is reported to have the immune cells necessary to get complete healing.

Additional benefits

Dr. Masao Nakamura of the O & P Medical Clinic in Japan has reported great success with the use of Infrared treatment for: Whiplash Menopause Shoulder stiffness; Rheumatism Sciatica Arthritis; Insomnia Acne Ear diseases and Gastroenteritis problems.

Chinese Researchers reported over 90% success in a summary of Chinese studies that assessed the effect of Infrared on: Soft tissue injury Lumbar strain Sciatica; Eczema with infection Cholecystitis-Pelvic infection; Tinea Neurodermatitis Diarrhea; Neurasthenia Pediatric pneumonia menstrual pain; Periarthritis of the shoulder/post-surgical infections and Facial paralysis (Bell's Palsy) Frostbite with inflammation.

Additional benefits

Additional research has suggested that FIR heat produces therapeutic effects in the following:

- ✓ **Brain:** Short-term memory reportedly improved/accelerated repair in brain contusions, Cerebral hemorrhages healing with FIR both speeds up and is significantly enhanced.
- ✓ **Collagen Tissues:** Helps Ligaments /Joint capsules /Tendons; In Fascia Synovium, FIR allegedly increases range of motion; FIR reportedly can assist in treatment of scarred, thickened or contracted tissues; Can increase extensibility of collagen tissues.
- ✓ **Body Tissues:** Reduces acidity in the body (FIR causes fruit to ripen faster by reducing acidity), Nerves; Neurasthenia -FIR reportedly adjusts autonomic nerve function; Reportedly FIR reduces over-stimulation of sensory nerves.

Additional benefits

- ✓ **Cells:** FIR attracts calcium ions to the cellular level; FIR promotes adhesion and osmosis of water molecules across the cellular membrane; FIR stimulates enzyme activity.
- ✓ **Joints:** Supposedly assists in reduction of swelling and inflammation by improving lymph flow; Purportedly decreases joint stiffness directly.
- ✓ **Pain Relief:** FIR reportedly reduces neuralgia headache pain during menstruation; May lead to increased endorphin production, which reduces pain.

The bottom line

Dr. Tsu Tsair Oliver Chi summarized the effect of infrared rays on the body in these words, “These rays are selectively absorbed by tissues needing a boost in within our tissues is associated with a variety of healing responses and may require a boost to a maximal level to ensure the fullest healing response possible in a tissue, which is being repaired. After boosting a tissue’s level to its maximum, the remaining rays pass onward harmlessly.”